

Follow-up to the MIM Meeting Durban, South Africa 15-19 March 1999

Written by Dan Okenu

For the first time in the history of public health in Africa, more than a thousand delegates gathered to discuss the control, treatment and prevention of malaria, a disease which afflicts millions of people all over the world, particularly in sub-Saharan Africa. This was in Durban, South Africa, where the Multilateral Initiative on Malaria conference took place from 14-19 March, 1999. With more than 300 million cases each year, there are five times more malaria cases than TB, AIDS, measles and leprosy combined. Malaria kills one million people annually, the majority of whom are children under five years of age from sub-Saharan Africa. To drive the point home, 3,000 people die from malaria every day.

Malaria research and control has received little attention, unlike AIDS and TB, perhaps, because malaria is restricted to poor countries, without the political will and financial muscle to combat this mosquito-borne disease. The economic burden of malaria in Africa is in excess of two billion US dollars per year, yet it has not done on African governments that the disease is a serious public health hazard and an economic threat to their people. In Durban, it became apparent that global warming and climatic changes such as El Niño, is taking malaria to greater heights, into new territories, the rich countries. A recent report shows that British mosquitoes along river Thames, are capable of transmitting malaria. There are reports of malaria outbreaks around airports in Geneva, Brussels and Oslo. This was put down to malaria-bearing mosquitoes in international flights from tropical countries, where the disease is endemic, although measures such as spraying aircrafts with insecticides before departure from malaria-endemic countries are in place. Airport malaria outbreaks are usually fatal, as the infected people have no previous exposure to malaria, which would have provided partial protection as seen in African adults. The devastating effect of malaria in Africa in recent times, the unimaginable impact on transmission by global warming, the re-emergence of malaria in new territories, like the newly independent states of the former Soviet Union, plus these pockets of airport cases in Europe may have rekindled the long forgotten quest to eradicate malaria, or at least put the disease under check. An otherwise orphan disease, malaria is at present enjoying the attention of world leaders and scientists. This is a welcome relief to the thousands of African children who if infected with the disease, may not live to celebrate their fifth birthdays. The commitment of those concerned to "Roll-Back" malaria for better control, treatment and prevention is highly appreciated.

The current effort is a multilateral initiative supported by international funding agencies from Europe, the United States, plus the World Health Organisation, to strengthen malaria research capability and control in Africa. What was unique about the Durban conference however, is that more than 50 percent of the delegates were highly trained African scientists, technocrats, public health experts, clinicians and other health professionals committed to the control and perhaps eradication of a neglected disease, that has brought the continent to its knees. The high quality presentations by these African professionals, working both inside and outside Africa, rekindled the hope that "Africa has come of age, and is, no longer, a dark continent".

In Durban, we were told that there is "no magic bullet" for controlling malaria. An effective vaccine against the disease may not be realised for the next 20 years or more. The available drugs of choice, especially chloroquine, are becoming less effective, because the malaria germs are becoming resistant to them. Control efforts through the use of insecticides and treated bednets is becoming problematic, as the mosquitoes that transmit the germs are developing thick skins for the insecticides. There is urgent need therefore to evolve new strategies for combating the disease. This was the major theme at the African Malaria Conference. There was a strong advocacy for an integrated approach, involving the use of drugs, prompt diagnosis, insecticide sprays and treated bednets, proper case management, and proper environmental management geared towards vector control, plus a continuous search for an efficacious

vaccine.

"Rolling-Back" malaria rolls the ball into the court of African governments. The onus of responsibility lies in their hands to ensure that these efforts are maximised towards alleviating the burden of malaria on the continent. One way forward is to actively involve the Ministries of Health in Africa, in this global effort through an improved primary health care schemes directed towards disease prevention and control. Prevention they say is better, and in fact cheaper than cure. Most African countries have a national malaria and vector control program that could be restructured to meet the current needs. To generate adequate information on disease prevalence, clinical cases, mortality and morbidity, surveillance of drug treatment failures that would be useful in policy changes. They would be responsible for public awareness, for instance, educate the people on how to minimise man-mosquito contact and thus, reduce malaria transmission. Developmental projects like construction of dams and urban planning should involve health professionals to avoid environmental degradation that gives rise to new breeding sites for mosquitoes. Health care services should be taken to the grassroots at community levels, where the disease is prevalent. Increased funding for malaria research in the national medical research institutes and universities. Non-governmental organisations (NGOs) and private-sector industries, especially the pharmaceuticals with a stake on national health should be encouraged by sound health policies to participate in disease prevention and control. Hospitals, especially university teaching hospitals and general hospitals should be properly equipped for prompt and adequate diagnosis, monitoring and surveillance of drug resistance. Malaria drug therapy may soon be changing to a multiple drug regimen, as in the treatment of TB, due to widespread resistance, but such decisions must be based on scientific evidence, to avoid expensive and un-affordable prescriptions in health centres, and drug policies that may increase the prevalence of resistant malaria in the community. African governments should support vaccine research, training of high quality personnel, collection of malaria baseline data in endemic communities towards an eventual vaccine trial in sites located in Africa. National Malaria & Vector Control programs should augment and co-ordinate the activities of the various NGOs and international organisation involved in malaria control in Africa. This author observed with satisfaction the presence of officials of the Ministries of Health from most African countries at the conference, for take-home messages to their administration. Africa with its vast human and material resources should take up the challenge in this people-oriented initiative.

It is worthy of mention that international organisations like WHO, UNICEF and UNDP are bringing their many years of expertise in managing human health and resources world-wide, to bear on the disease. The new Director-General of WHO, Dr. Gro Harlem Brundtland, has placed malaria on the highest priority, by setting up the "Roll-Back Malaria" program to develop a new health sector-wide approach to combat the disease. The World Bank president, James Wolfensohn, noted that "making significant, sustained inroads in the battle against malaria urgently requires a co-ordinated, focused initiative, and that governments, international organisations, the research community and the pharmaceutical industry must all play a major role". Nigeria's Professor Ayo Oduola gave an excellent treatise on the deplorable malaria situation in Africa and the objectives of the initiative. He solicited for support from the rich industrialised nations and funding agencies. African governments should complement and support this timely initiative to reduce the burden of malaria on the continent. The Organisation for African Unity, through its Scientific, Technical & Research Commission should bring its resources to bear on this laudable enterprise. The African Development Bank should award grants to member countries for malaria control activities.

The meeting in Durban was also used as the site to launch the Drive Against Malaria (DAM) in Africa, in partnership with the Malaria Foundation International (MFI) and Memisa. British global explorer Dave Robertson is attempting to set a record driving around the world - and South Africa is the 27th country he has visited. Dave is using this journey to spread awareness of the devastation caused by malaria and to raise funds and political support for education and malaria control efforts. Dr. David

Nabarro, Manager of the Roll Back Malaria initiative, hails the Drive Against Malaria as an effort that will ð...transform the landscape of community action against malaria.ð

On a lighter mood, it was not all malaria talk-show throughout the conference, the participants took time off to play tourist, and indulge in culinary adventures, sampling the different foods and wines, representing the diverse culture of South Africa. There was also an opportunity to teach our American and European colleagues how to dance to typical African rhythms. This was in one of the many relaxation joints dotting the beaches around the city of Durban, with its well-laid out streets, gardens and parks. On the other extreme, this author also visited our African brothers and sisters, the Zulus, in their "homeland", one of the relics of the old political dispensation in that country. The Multilateral Initiative on Malaria in Africa has been started and nurtured by the developed world, where malaria is non-existent, it is the duty of Africans to maintain the momentum of this international effort, for its immense benefits, which according to Roll-Back Malaria includes a drastic reduction in the malaria burden in Africa, reduction in poverty and an appreciable human resource development. We all stand to loose, if this initiative is not supported, and allowed to fissile out, as the disease will continue to undermine Africa's economic development.

A Brief Biography of the author: Daniel M.N. Okenu holds a Ph.D. in Cellular Parasitology from the University of Ibadan, Nigeria, where he taught Genetics, Cell Biology, and Parasitology for some years before taking up appointment as research scientist at the National Insitute for Medical Research, Lagos, Nigeria. From 1995 to 1997, Dr. Okenu was a visiting scientist at the International Center for Genetic Engineering and Biotechnology, New Delhi, India. Currently he is at the London School of Hygiene and Tropical Medicine, United Kingdom, on a two-year Wellcome Trust Traveling Research Fellowship. Dr. Okenu's research interest is in population genetics and immuno-epidemiology of malaria antigens. He is also interested in bridging the gap between scientists and policy-makers in Africa, and in encouraging the most effective use of available resources for malaria control on the continent. He is a Fellow of the Royal Society of Tropical Medicine & Hygiene, London.